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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,937	10/07/2003	Thomas B. Stanford JR.	B-4588NP 620930-1	6021

7590 07/15/2008  
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EXAMINER
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MARTIN, PAUL C

ART UNIT	PAPER NUMBER
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1657

MAIL DATE	DELIVERY MODE
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07/15/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/680,937	<b>Applicant(s)</b> STANFORD ET AL.	
	<b>Examiner</b> PAUL C. MARTIN	<b>Art Unit</b> 1657	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 14, 16, 17, 19-27 and 29-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14, 16, 17, 19-27 and 29-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Please note that the e-signature of Nicole Chang in the remarks is not proper format. The registration number should not be within the slash marks.

Claims 14, 16, 17, 19-27 and 29-32 are pending in this application and were examined on their merits.

The rejection of Claims 14, 16, 17, 19-27 and 29-32 under 35 U.S.C. § 103(a) as being unpatentable over Keyes (US 4,169,765) in view of Yamagishi *et al.* (US 6,730,212 B1) has been withdrawn due to the Applicant's remarks and the amendments filed 01/14/08.

### ***Response to Arguments***

Applicant's arguments, see Remarks, filed 5/5/08, with respect to the rejection(s) of claim(s) 14, 16, 17, 19-27 and 29-32 under 35 U.S.C. § 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made below..

### ***Claim Objections***

Claims 20 and 21 are newly objected to because of the following informalities:

Claim 20 is dependent upon cancelled claim 18. Appropriate correction is required.

Claim 21 is objected to as being dependent upon objected Claim 20.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 14, 16, 17, 19-27 and 29-32 are newly rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Amended Claim 14 is now drawn to a method of assaying a plurality of enzymes expressed by an organism with a sensor, the sensor comprising a substrate; more than one pair of electrodes; a sol-gel matrix comprising more than one sol-gel enzyme wherein each of the more than one sol-gel enzymes is associated with at least one of the more than one pair of electrodes and wherein an organism with at least one of the more than one pair of electrodes; wherein (a) an organism expresses at least one organism-enzyme on the surface of the sensor; (b) the at least one organism-enzyme causes a reaction with the

Art Unit: 1657

at least one reactant of the sensor; the product according to process step (b) reacts further with said more than one sol-gel enzyme of the sensor; (d) the products of process step (c) modulate at least one property of the transducer material; (e) and the modulated property is measured.

The instant sensor only comprises at least one substrate (reactant), therefore either the sensor will therefore only be able to recognize one organism-enzyme capable of reacting with the substrate (reactant) and rendering the assaying a plurality of different enzymes expressed by an organism impossible, or alternatively the plurality of different enzymes expressed by the organism are all able to react with the at least one substrate (reactant) rendering it impossible to distinguish any enzyme signal from any other. Further, in the case of the latter example, even if one were to have a sensor comprising multiple different substrates (reactants) it would be impossible to measure a reaction catalyzed by multiple enzymes on multiple substrates all occurring on more than one pair of electrodes as all of the signals would be arriving simultaneously and be indistinguishable. Claims 16, 17, 19-27 and 29-32 are rejected as being dependent upon rejected Claim 14.

No Claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL C. MARTIN whose telephone number is (571)272-3348. The examiner can normally be reached on M-F 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jon Weber can be reached on 571-272-0925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Paul Martin  
Examiner  
Art Unit 1657

07/09/08

/JON P WEBER/

Supervisory Patent Examiner, Art Unit 1657